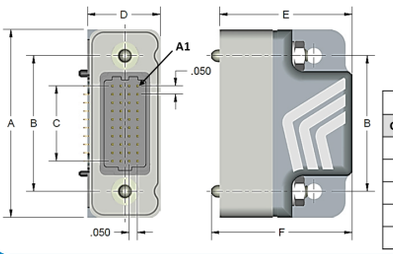
versI™

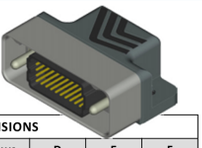
VRRAM – Rugged Right Angle (Male)

Pitch: 1.27 mm

VRRAM signal-integrity connectors are ruggedized versions of the standard VSRAM male connectors. These connectors can be used in extreme environmental conditions while maintaining high reliability and continuous performance.

DIMENSIONS





VRRAM DIMENSIONS

Columns	A	B	C	Rows	D	E	F
10	1.125	0.813	0.450	4	0.438	0.798	0.847
20	1.625	1.313	0.950	5	0.488	0.848	0.897
30	2.125	1.813	1.450	6	0.538	0.898	0.947
40	2.625	2.313	1.950	8	0.638	0.998	1.047
50	3.125	2.813	2.450	10	0.738	1.098	1.147

Sample Part Number Format: VRRAM-04-10-50-02-N

VRRAM – □ – □ – □ – □ – □

SERIES
Rugged Right Angle (Male)
1.27 mm

ROWS
04 – 4 Rows
05 – 5 Rows
06 – 6 Rows
08 – 8 Rows
10 – 10 Rows

COLUMNS
10 – 10 Columns
20 – 20 Columns
30 – 30 Columns
40 – 40 Columns
50 – 50 Columns

CONTACT PLATING
50 – 50 µ" Au

TERMINATION
00 – Press-fit
01 – Paste-in-hole
02 – PTH 0.078"
03 – PTH 0.109"
04 – PTH 0.140"
05 – PTH 0.156"
06 – PTH 0.172"

OPTIONS
Blank – Standard[1]
G – Guide pin[1]
N – Fixed jacknut[1]
J – Turning jackscrew[2]
L – Locking screw[2]
E – Standard/EMI gasket[1]
GE – Guide pin/EMI gasket[1]
NE – Fixed jacknut/EMI gasket[1]
JE – Turning jackscrew/EMI gasket[2]
LE – Locking screw/EMI gasket[2]

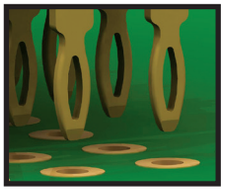
NOTES

[1] Shells & hardware supplied uninstalled.
[2] Connectors come pre-assembled with shells & hardware.
AirBorn can manufacture other configurations to your exact specifications.
RoHS Complaint; certificate of conformance available upon request with each shipment

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

FEATURES

verSI board-mount connectors feature low mating force / high-reliability contact system with four points of contact. The open-pin field design allows for flexibility in termination schemes. Single-ended, differential pair, power, and ground are all available in one connector design. Guide hardware is optional.



MATERIALS and FINISHES

Shell: . . . . . Aluminum alloy 6061-T6 per SAE AMS 4027 or 6061-T6511 per QQ-A-200/8
Finish: . . . . . Electroless nickel per SAE AMS-2404, Class 3, 500 µIN min
Pin Contacts (Mating Face): . . . . . Phos bronze per ASTM B103
Pin Contacts (Termination): . . . BeCu per ASTM B768 (press-fit contact) or brass alloy per ASTM B36 (PIH or PTH)
Contact Finish (Mating Face): . . . . . Localized gold finish per ASTM B488, Type II, Code C, over nickel per ASTM B689 Type I 50 µIN min
Contact Finish (Termination Face): . . . Localized gold finish per ASTM B488, Type II, Code C, 50 µIN min over nickel per ASTM B689 Type I, 50 µIN min (Press Fit) or Localized Gold per ASTM B488, Type 1, Code A or C, 10-25 µIN over nickel per ASTM B689 Type I, 50 µIN min (PIH or PTH)
Molded Insulators: . . . . . Glass-filled liquid crystal polymer (LCP) per ASTM D5138
Potting Compound: . . . . . Frey Eng. Co. insulating compound CF3003-80
Hardware (except washers): . . Stainless steel per ASTM A484/A484M, A582/A582M, or ASTM A320; passivated per SAE AMS-2700, Method 1, Type 2
Washers: . . . . . Stainless steel per NASM35333 (ASTM A240), passivated per NASM35333 (SAE AMS-2700).

SI DATA – Simulated (Connectors Only)

1	Diff. Insertion Loss	-0.25 dB @ 5 GHz	-3dB @ 16 GHz
2	Diff. Return Loss	-20 dB @ 5 GHz	-6 dB @ 14 GHz
3	Diff. Impedance	100 ohm ±10% @ 50 ps rise time	
4	Diff. Skew	< 2 psec	

PERFORMANCE

Contact Rating: . . . . . 2 amperes maximum
Operating Temperature: . . . . . -55° C to 125° C
Min. Contact Wipe: . . . . . 1.27 mm (0.050")
Contact Normal Force: . . . . . .35–40 grams
Max Recommended Voltage: . . . . . 200 V, RMS, 60 Hz
Insulation Resistance: . . . . . 5,000 megaohms minimum @ 500 VDC
Durability: . . . . . 2500 connector mating cycles
Sinusoidal Vibration: . . . . . 20 g (EIA-364-28, condition IV)
Shock: . . . . . 50 g (EIA-364-27, condition E)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

AirBorn:

VRRAM-04-10-50-04-G VRRAM-06-10-50-03-G VRRAM-06-40-50-03-N VRRAM-06-50-50-03-N VRRAM-04-50-50-03-G VRRAM-04-20-50-04-G VRRAM-06-20-50-04-G VRRAM-04-10-50-03-G VRRAM-06-40-50-00-N VRRAM-04-20-50-03-G VRRAM-05-40-50-00-N